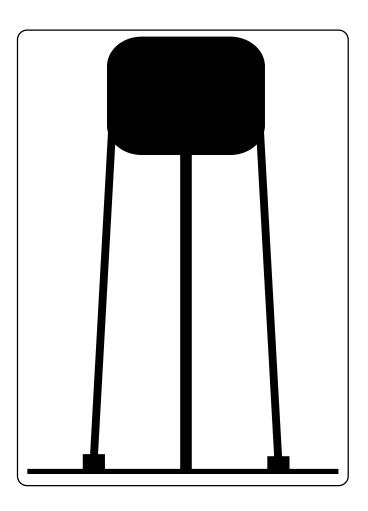


Water Distribution System Permitting

A guide to DHEC's permitting process



October 1997





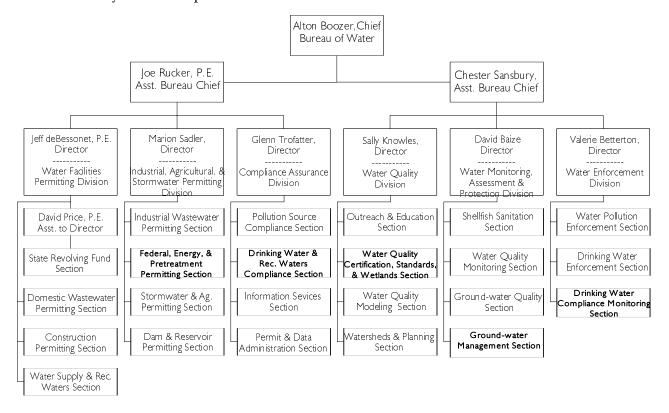
This document has been prepared for use by consulting engineers, developers, industries, and public entities dealing with the Bureau of Water on water distribution system projects. It provides:

- → An overview of the Bureau's responsibilities
- → A summary of regulatory requirements
- Identification of the entities involved in permitting, and
- → Highlights of the review and approval procedures

We hope this document will help everyone have a better understanding of the water distribution system permitting program. Through this understanding, we feel it will be easier to go through the administrative processes, technical reviews, and approval processes of the Bureau.

This document provides an explanation of the Bureau's decision making processes. Our decisions are made based on the technical, administrative, and legal aspects of a water distribution system project with the protection of the environment and public health as the major considerations.

The Bureau is committed to providing quality service in a reasonable time in all aspects of the permit programs. To do this, we need the cooperation of all parties who deal with us in recognizing our responsibilities and the manner in which we implement them. Therefore, please take the time to read this document carefully. This document is not a replacement for the regulations on water distribution system projects. If you have any questions about our water distribution system permitting program, please let us know. We welcome any comments you may have on this document or suggestions on how we can improve our service to you and the public.







Why is a permit needed for water distribution system construction?



It is required by state law/regulations. DHEC's review insures that reliable systems are built to provide safe drinking water for the public.

South Carolina's Safe Drinking Water Act and the State Primary Drinking Water Regulations (R.61-58) provide the legal authority and mandate for DHEC to issue construction permits for proposed drinking water systems. These regulations also address obtaining approval to place the system into operation after construction.

DHEC's construction permitting program helps insure that South Carolina's 2,700 public water systems deliver high quality water. Coupled with DHEC's compliance oversight and monitoring programs, the permitting program focuses on prevention of water quality problems. A proper design will typically lead to safe drinking water for South Carolinians.

Whether the project is for a small extentions to an existing water system or new elevated storage tanks, the permit process provides DHEC opportunity to critique the technical and administrative aspects of the proposal.

Where?



Where do I apply for a permit?

DHEC's Bureau of Water is responsible for permitting water distribution systems: 2600 Bull Street, Columbia, SC 29201

The Bureau of Water (Bureau) is under the Office of Environmental Quality Control (EQC) of DHEC. The Bureau is responsible for protecting the quality of the state's surface and ground water and ensuring safe drinking water for the public. To meet this responsibility, the Bureau issues permits, approvals, and certifications for a variety of wastewater and drinking water projects. This booklet explains the permitting procedures of the Bureau for water distribution system projects.

WATER FACILITIES PERMITTING DIVISION

The Water Facilities Permitting Division handles the permitting responsibility for the construction of water distribution projects. Projects are managed by the Construction Permitting Section. This section coordinates project approvals for normal, delegated review and general permits. Internal to the Bureau of Water, the Construction Permitting Section will coordinate as necessary with other Bureau programs (e.g., compliance, enforcement, monitoring).

Others Involved in the Permitting Process

State agencies, other program areas of DHEC, and organizations may be involved in the water distribution system permitting program of the Bureau. The Bureau will coordinate with most of these entities by providing basic information on the project to them. If these entities need more information, they will request it from the consulting engineer. The consulting engineer will be notified concerning other entities by the Bureau during the review of a project.

Normally, a permit will not be issued until all the certifications, comments, or permits are received from these entities. Therefore, at the start of a project, the consulting engineer should contact the entities



involved in the project. This will help avoid any unusual delays in the Bureau's permitting process.

The following are the groups involved in permitting. Their type of involvement is given along with information concerning their requirements or permits.

DHEC's Bureau of Ocean and Coastal Resources Management

The Bureau of Water coordinates with the Bureau of Ocean and Coastal Resources Management (OCRM) on all water distribution system projects located in a county under OCRM's jurisdiction. These coastal counties are Horry, Georgetown, Berkeley, Charleston, Dorchester, Colleton, Beaufort, and Jasper.

An information form on the project is sent to OCRM. OCRM will decide whether the project is in compliance with the Coastal Zone Management Plan. If OCRM needs any additional information on the project, they will request it directly from the project's consulting engineer. OCRM's review includes a public notice of applications for consistency certification. For delegated review projects, OCRM coordination usually occurs prior to submission of the application package to the Construction Permitting Section.

Also, OCRM has authority for sediment and erosion control permitting and permitting certain activities in the "critical zone."

EQC District Offices

The Bureau may request comments from the appropriate District Office of EQC. The District Office will provide information to the Bureau on the the adequacy of the system proposing to provide water to the project. Also, written authorizations for water distribution systems to be placed into operation are granted by the District Offices. Please see Appendix 1 for a list of the District Offices, the counties for which each is responsible, their telephone numbers, and their addresses.

Local Planning Authorities

In some counties, authority has been provided to an entity regarding water service. For example, certain counties have franchising authority in the unincorporated parts of their county. In this situation, DHEC provides an opportunity for such entities to concur with permit applications. A consistency letter or other indication of support for the project from such a local authority should be submitted along with the application package.

SC Budget and Control Board

The SC Budget and Control Board handles the "banking phase" of the State Revolving Fund (SRF) program. Therefore, on all projects funded

by the SRF program, the Bureau coordinates with the Budget and Control Board. This involves establishing the interest rates, payment schedule, loan conditions, etc., for entities that apply for SRF loans.

SC Department of Commerce

The SC Department of Commerce (Commerce Department) maintains a geographical information system (GIS) on the location of water distribution systems. This program is called the S.C. Infrastructure Program (SCIP).

Copies of the construction permits and overall layouts of the water distribution systems on projects permitted by the Water Facilities Permitting Division are provided to the Commerce Department. The Commerce Department uses this information in their day to day activities.

Other Related Permits

Construction of water distribution systems may also require other DHEC construction permits. If you are unclear, contact our office. Other permitting functions may include:

- ⇔ Sediment and erosion control permit
- ⇒ NPDES stormwater permit
- → Navigable waterway permit
- ⇒ Interbasin transfer permit

Regarding NPDES stormwater permitting, most projects can be covered under a general permit issued by DHEC. To streamline permitting, application for the sediment and erosion control permit serves as a notice of intent to get coverage under the NPDES stormwater permit.

If identified during the water distribution permitting process, the review for compliance with the navigable waterway program can be performed concurrently with any conditions added to the water distribution construction permit.

The interbasin transfer permitting must track separately, but can parallel the water distribution construction permitting process. If a water distribution project would by design, transfer enough water to require an interbasin transfer permit, DHEC can issue the water distribution construction permit ahead of the interbasin transfer permit. In this case, the permittee could use the water distribution system, but not to the extent that the quantity thresholds (e.g., 1 million gallons per day) in the interbasin transfer program would be exceeded.





How do I apply for a permit?

An application package consists of a completed permit application form, plans/specifications and certain administrative material.

Plans and specifications and in some cases, a preliminary engineering report (PER), are submitted to the Construction Permitting Section. Water distribution system projects have multiple phases which are

- ⇔ *Phase I*: PER (if applicable).
- → *Phase II*: Plans/specs (construction permit application).
- *→ Phase III*: Operational Approval.

Each phase must be completed with Bureau approval before the project can go to the next phase.

To be conservative, projects should be submitted at least ninety (90) days prior to the date a construction permit will be needed. The actual review time will vary. This will depend upon the complexity of the project and the workload of the Bureau when the project is submitted.

Delegated Review. The Bureau has a Delegated Review Program (DRP) for water distribution system projects in which qualified public entities perform the technical plan review for the Bureau for water distribution system projects. The procedures are the same as the non-delegated entities except for the submittal requirements on the PER and plans. For these projects, the submittal is made directly to the delegated entity. After the delegated entity completes the technical review and obtains the complete administrative package, the delegated entity will make the submittal to the Construction Permitting Section for permitting.

General Permits. Regulation 61-58 provides for a general construction permit that can be issued to water systems under certain conditions. Once the general permit is issued, the system can construct water lines without individual DHEC permits. The system makes an annual report to DHEC on the construction activity that occurred under the general permit.

Among other requirements, the system must have a computerized hydraulic model of its distribution system. This model shall include a sufficient number of lines to adequately represent the distribution system.

Phase I: PER

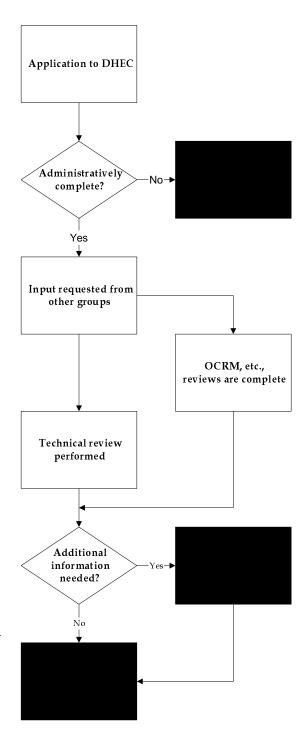
In some cases, a PER may be required for a project. Where discretionary, PER submittal may be useful in getting DHEC approval of the conceptual design prior to allocating funds for a detailed design (i.e., plans/specs).

Phase II: Plans/Specs (Construction Permit Application)

Submittal of a set of plans/specs as part of the application for a permit to construct is described below and summarized in the chart.

a. Submittal Package

A complete administrative package must be submitted by an engineer registered in SC. The submittal package must include information in the box on the following page.



Submittal Information

- A transmittal letter outlining the submittal package.
- 2. Four (4) sets of plans and specifications, signed and stamped by the consulting engineer (specifications may not be required if the consulting engineer has approved standard specifications on file with the Bureau).
- 3. The original application for permit to construct (most current version) properly filled out with the appropriate signatures and two (2) copies.
- 4. A letter of acceptance from the entity providing the water stating ability and willingness to serve the project with water. It should also include a statement on the ownership and operation and maintenance of the proposed water distribution system, if this is the same entity. Otherwise, a separate letter from the entity agreeing to own, operate and maintain the system must be provided.
- 5. Three (3) copies of the appropriate design calculations including flow test results.
- 6. Three (3) copies of an 8 $\frac{1}{2}$ " x 11" location map. This should be separate from the plans. Therefore, even if there is a location map on the plans there still needs to be a separate map on an 8 $\frac{1}{2}$ " x 11" sheet of paper with two (2) copies provided.
- 7. Three (3) copies of the preliminary engineering report, if applicable. The consulting engineer should sign and seal each copy of the report.

The submittal package should be sent to the attention of the Section Manager of the:

Construction Permitting Section Bureau of Water DHEC 2600 Bull Street Columbia, SC 29201

An incomplete submittal may be returned. Therefore, please ensure the submittal package contains the correct number of copies of each item.

b. Administrative Processing

The review of construction projects will normally be on a "first come/first serve" basis. Therefore, construction plans and specifications will be reviewed in chronological order based on the date the complete package is received. Upon receipt of a complete package, the project will be placed in line for technical review. For

submittals missing certain administrative items, a letter will be sent out noting the deficiency.

For a complete submittal package, the requests for comments from the groups involved in the permitting process will be sent when the project is initially received. These requests will be sent to DHEC's Bureau of Ocean and Coastal Resources Management for projects in coastal counties. It may be sent to the appropriate District Office of EQC depending upon the project.

c. Plan Review

When a project is assigned to DHEC's project reviewer, it will be reviewed on a technical and administrative basis. The administrative review will involve ensuring the Bureau coordinates with the appropriate entities and that capacity exists in the water system providing water. In some cases, a system may have a moratorium in effect. Also, the Bureau will insure proper ownership and operation and maintenance of the proposed system. Plans and specs are reviewed to insure compliance with sound engineering standards and Regulation 61-58.

d. Owner Changes Before Construction Permit Is Issued

If a permit to construct has not been issued and the project owner changes, the new owner must submit a new construction permit application and two (2) copies. This application must be completely filled out and signed by the engineer(s) responsible for the design and construction even if the new owner does not change engineers. The project will then be administratively handled as outlined previously with the construction permit issued to the new owner.

If the new project owner does change engineers, then the original application package will be returned to the engineer that made the submittal for the previous owner. The new owner must then have the new engineer resubmit. This new submittal must be a complete package. This package will be processed and handled according to the normal procedures.

e. Extension of a Construction Permit

If a construction permit expires, the consulting engineer can request an extension of the permit. This request should be made in writing with a copy of the construction permit attached. If a permit expires after an extension is granted, future requests for extensions should include a copy of the permit and a copy of each Bureau extension letter. DHEC reserves the right when a lengthy time period has expired to require a new application submittal.

Upon receipt of a permit extension request, the Bureau will review the project file to decide if an extension can be granted. Also,

comments from the appropriate EQC District Office may be requested. If no problems exist, an extension of the permit will be granted. Normally, the extension will be for one year from the date of the extension letter. If the Bureau denies a request for a construction permit extension, the consulting engineer will be advised of the course of action to be followed.

f. Owner Changes After Construction Permit Is Issued

If the project owner changes after a construction permit is issued and the consulting engineer remains the same, the consulting engineer must submit a new, original construction permit application with two (2) copies showing the new project owner. The application must be completely filled out and signed by the engineer(s) responsible for the design and construction even if the new owner does not change engineers. Then, either the construction permit will be reissued to the new owner or a letter written approving the change of owner.

If the new project owner changes consulting engineers after a construction permit is issued, then the new engineer must submit a new original construction permit application with two (2) copies. The application must be completely filled out and signed by the engineer(s) responsible for the design and construction. Also, a copy of a release letter written to the new engineer from the original design engineer must be submitted. This release letter must give the new engineer the right to use the design plans prepared by the original engineer. Upon receipt of this information, either the construction permit will be issued to the new owner or a letter written approving the change of owner.

If for any reason the original design engineer will not provide a release letter, the construction permit will not be reissued to the new owner. Further, the new owner is not authorized to start or continue construction until a construction permit is issued to them. However, if construction is complete when the owner changes engineers, the permit to operate will not be issued until the appropriate release is obtained from the original design engineer and the permit is reissued to the new owner.

If a release is not obtained by the new engineer, then the Bureau will not issue a permit to place the system into operation and may revoke the construction permit. If the permit is revoked, it will be necessary for the new engineer to resubmit the project as a new project with a complete submittal package. This submittal will be handled according to the procedures listed above.

g. Engineer Changes After Construction Permit Is Issued

While unique situations arise, most cases would be handled as follows. Since the permit to construct was based on an application indicating that the original engineer would certify the construction

phase, then an approval to place the system into operation cannot be granted without additional information. If the project owner changes engineers after a construction permit is issued, a new application with two (2) copies should be submitted. In that application, the new engineer would sign the item regarding the certification of construction, but not the design. In addition, DHEC would be looking for information indicating that this change of engineers was consistent with regulations governing the practice of engineering. The type of information that could be submitted would include copies of:

- ⇒ Letter of release from the original engineer.
- Letter from the owner terminating the services of the original engineer.

In a situation where the second engineer sought to alter the original design, a new application and resubmittal of plans and specifications would be appropriate.

h. Modifications to Approved Plans

Depending on the significance of the modification request, a new submittal may be required. If significant, modifications to the plans and specifications after a construction permit is issued will be handled as a new submittal. A complete administrative package must be submitted. The administrative review process for modified plans and specifications will be essentially the same process as given in the sections entitled "Administrative Processing" and "Plan Review."

Phase III: Operational Approval

a. Construction

After the Bureau issues the construction permit, the project can be built. The consulting engineer will perform construction inspections as required by the application for permit to construct. Also, DHEC may perform construction inspections.

b. Authorization to Place the System into Service

When construction is complete, the consulting engineer will send a letter to the appropriate District Office of EQC certifying the project is built according to the permitted plans and specifications. Also, additional items may need to accompany the letter of construction certification such as:

- ⇔ A copy of the record drawings.
- A letter of final acceptance for ownership, operation and maintenance of the system from the appropriate entity.
- When applicable, a letter from OCRM stating their certification requirements have been met.
- ⇒ For pump stations, the pump test results.

Contact the applicable District Office (Appendix 1) to obtain specific details on a submission package and refer to R.61-58.

c. As-built Plans

If construction is not according to the approved plans and specifications but the changes are acceptable to the consulting engineer as-built plans must be submitted to the appropriate Section for review and approval. The submittal package for as-built plans must include the following:

- A transmittal letter outlining the submittal. This letter must reference the project by the name (as shown on the construction permit), county, and construction permit number. It also must list the changes to the approved plans.
- Three (3) sets of the as-built plans and, if necessary, specifications.

The administrative review process for as-built plans and specifications will be essentially the same process as given in the sections entitled "Administrative Processing" and "Plan Review."

After approval of the as-built plans, the consulting engineer will send a letter to the appropriate District Office certifying the project is built according to the approved as-built plans and specifications. The procedures given in the section entitled "Authorization to Place the System into Service" will be followed for granting authorization to place the lines into service.

If the Bureau does not approve the as-built plans, the project must be rebuilt according to the approved plans and specifications. After the contractor rebuilds the project according to the approved plans and specifications, the consulting engineer will send a letter to the appropriate District Office certifying the project is built according to the approved plans and specifications. The procedures given in the section entitled "Authorization to Place the System into Service" will be followed for issuance of the final approval to operate.

APPENDIX 1

Offices for Approval to Place Projects into Operation

| DHEC District Offices of EQC | | | |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Appalachia I 2402 N. Main Street Anderson, SC 29621 864-260-5569 (fax: 260-4855) Anderson and Oconee Counties | Lower Savannah 218 Beaufort Street, NE Aiken, SC 29801 803-641-7670 (fax: 641-7675) Aiken, Allendale, Bamberg, Barnwell, Calhoun and Orangeburg Counties | | |
| Appalachia II 301 University Ridge, Suite 5800 Greenville, SC 29601 864-241-1090 (fax: 241-1092) Greenville and Pickens Counties | Pee Dee 145 E. Cheves Street Florence, SC 29506 843-661-4825 (fax: 661-4858) Chesterfield, Darlington, Dillon, Florence, Marion and Marlboro Counties | | |
| Appalachia III 975 N. Church Street Spartanburg, SC 29303 864-596-3800 (fax: 596-2136) Cherokee, Spartanburg and Union Counties | Trident 1362 McMillan Ave., Suite 300 Charleston, SC 29405 843-740-1590 (fax: 740-1595) Berkeley, Charleston and Dorchester Counties | | |
| Catawba P.O. Box 100 Fort Lawn, SC 29714 803-285-7461 (fax: 285-5594) Chester, Lancaster and York Counties | Upper Savannah 613 South Main Street Greenwood, SC 29646 864-223-0333 (fax: 223-6935) Abbeville, Edgefield, Greenwood, Laurens, McCormick and Saluda Counties | | |
| Central Midlands P.O. Box 156 State Park, SC 29147 803-935-7015 (fax: 935-6724) Fairfield, Lexington, Newberry and Richland Counties | Waccamaw 1705 Oak Street Plaze, Suite #2 Myrtle Beach, SC 29577 843-448-1902 (fax: 803946-9390) Georgetown, Horry and Williamsburg Counties | | |
| Low Country 1313 Thirteenth Street Port Royal, SC 29935 843-522-9097 (fax: 522-8463) Beaufort, Colleton, Hampton and Jasper Counties | Wateree 105 Magnolia Street Sumter, SC 29151 803-778-1531 (fax: 773-6366) Clarendon, Kershaw, Lee and Sumter Counties | | |